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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/677,627	10/02/2003	Masahiro Yatake	U 014842-6	4186
140	7590	10/14/2005	EXAMINER	
LADAS & PARRY 26 WEST 61ST STREET NEW YORK, NY 10023			KLEMANSKI, HELENE G	
			ART UNIT	PAPER NUMBER

1755

DATE MAILED: 10/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/677,627

Applicant(s)

YATAKE, MASAHIRO

Examiner

Helene Klemanski

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 18 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 2-8 and 11-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-5, 7, 8 and 11-23 is/are allowed.
- 6) ☒ Claim(s) 6 and 10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. Claims 2, 4, 6-8, 10, 16 and 18 have been amended, claims 1 and 9 have been cancelled and new no claims have been added. Hence, claims 2-8 and 10-23 are pending in the application.
2. The 112, second paragraph, rejections to the claims as set forth in the previous Office Action dated May 17, 2005 have been overcome by applicant's amendments and are now withdrawn.
3. Applicant's arguments are persuasive to the extent that the 102(e) rejection over Lee et al. ('817) as set forth in the previous Office Action dated May 17, 2005 is withdrawn.
4. Applicants have provided evidence in the specification that the ink of the instant claims containing specific chelating agents provides superior storage stability as compared to the inks containing EDTA of Ichizawa et al., Lin, Yeh et al. and Parliament. Accordingly, applicants showing of unobvious and unexpected results have overcome the 103(a) rejections over Ichizawa et al., Lin, Yeh et al. and Parliament. A new rejection is entered below.

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 6 is rejected under 35 U.S.C. 102(b) as being anticipated by Lee et al. (US 6,592,657).

Lee et al. (US 6,592,657) teach an ink jet ink composition comprising 0.1-40% by weight of an organic solvent such as glycol ethers and alkylene glycols, 0-10% by weight of a surfactant such as SURFYNOL (i.e. acetylene glycol derivative), 0.5-10% by weight of a colorant such as any of the color dyes or pigments known to be used in ink jet inks, 0.05-20 of an organo-phosphonic acid such as hydroxyethylene di(phosphonic acid) (HEDP) and water. See col. 2, lines 7-36, col. 3, lines 35-67, col. 4, lines 9-67, col. 5, lines 2-27, col. 6, lines 34-27 and claims 1-3, 5 and 6. The ink jet ink composition as taught by Lee et al. appears to anticipate the present claims.

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 6 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee et al. (US 6,592,657) in view of Ichizawa et al. (US 6,368,397).

Lee et al. (US 6,592,657) is cited and relied upon for the above stated reasons.

Lee et al. (US 6,592,657) fails to teach the use of a pigment that has been made to be

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dispersible in water by being enveloped in a polymer or wherein the ink jet ink further contains polymer fine particles as claimed by applicants.

Ichizawa et al. (US 6,368,397) teach an ink jet ink composition comprising 0.3-20 wt% of a pigment such as an inorganic or organic pigment, an aqueous polymer in the form of a colloid (i.e. polymer particles), a water-soluble organic solvent such as alkyl ethers of polyhydric alcohols or hexylene glycols and water. The pigment may be surface treated with a substance that covers the pigment surface or a pigment that is self-dispersible in water may be used. The ink jet ink composition may further contain 0.001-7 wt% of a surfactant such as an acetylene glycol derivative and a chelating agent. Ichizawa et al. further teach that the ink jet ink composition contains particles such that the number of particles having a particle diameter larger than 5  $\mu\text{m}$  is smaller than 50/ $\mu\text{l}$  (i.e. polymer fine particles). See col. 4, lines 22-52 and lines 49-52, col. 5, lines 56-65, col. 7, lines 1-25, col.8, line 63 – col. 9, line 5, col. 10, line 64 – col. 11, line 1, col. 11, line 55 – col. 12, line 28, col. 12, lines 38-46 and claim 1.

Therefore, it would have been obvious to one having ordinary skill in the art to have replaced the pigments known to be used in ink jet inks of Lee et al. with the pigments that may be surface treated with a substance that covers the pigment surface or a pigment that is self-dispersible in water and the polymer particles of Ichizawa et al. because Ichizawa et al. shows that these pigments and polymer particles are known to be used in ink jet ink compositions.

***Response to Arguments***

9. Applicant's arguments with respect to claims 6 and 10 have been considered but are moot in view of the new ground(s) of rejection.

***Allowable Subject Matter***

10. Claims 2-5, 7, 8, 11-23 are allowed.

11. The following is a statement of reasons for the indication of allowable subject matter: This application teaches a water-based ink comprising a colorant, water, a water-soluble organic solvent, a surfactant and a specific chelating agent as claimed by applicants. The closest prior art of record is Ichizawa et al., Lin, Yeh et al. and Parliament which all teach an aqueous ink comprising a chelating agent selected from a long list of chelating agents including EDTA and some of applicants specific chelating agents. Applicants have provided evidence in the specification that the ink of the instant claims containing specific chelating agents provides superior storage stability as compared to the inks containing EDTA of Ichizawa et al., Lin, Yeh et al. and Parliament. Accordingly, applicants showing of unobvious and unexpected results have overcome the 103(a) rejections over Ichizawa et al., Lin, Yeh et al. and Parliament and these claims are allowable.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helene Klemanski whose telephone number is (571) 272-1370. The examiner can normally be reached on Monday-Friday 5:30-2:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Helene Klemanski  
Primary Examiner  
Art Unit 1755



HK  
October 12, 2005